



Medical Director: Responsibilities and Duties

PROCEDURE

MEDICAL DIRECTOR'S QUALITY ASSURANCE REVIEW

OBJECTIVE

All mammography facilities shall designate a licensed physician to provide medical direction for the delivery of mammography services. The objective of this form is to provide the designated physician ("medical director") with guidance and information to help the medical director perform and document the required responsibilities.

The medical director is responsible for the clinical aspects of the x-ray examinations and other procedures related to mammography. Also, the medical director is responsible for conducting an on-site visit to each mammography station within the facility at least monthly for the purpose of providing professional feedback regarding clinical image quality and quality assurance procedures, for review of quality control documentation, and for ensuring safe operating procedures are used in the delivery of mammography services (Section 13523(2)(d)(iii) of the Public Health Code of the State of Michigan).

In conjunction with this form, we highly recommend that the "medical director" be familiar with all sections of the American College of Radiology's Mammography Quality Control Manual.

The medical director shall provide **monthly** professional feedback regarding clinical image quality, safe operating procedures, and quality control documentation.

FREQUENCY

Not all quality control tests are performed on a monthly basis. Some quality control tests are performed quarterly, semiannually, or annually. The medical director's review of each quality control test should be done the month immediately following when the test was performed.

PROCEDURE STEPS

1. The medical director shall review **each** of the 11 categories of the technologist's quality control tests, ensuring that:
 - The test was performed at the required frequency.
 - The test was performed using the written procedure in the facility's quality assurance manual.
 - The results are properly documented or charted.
 - When the test did not fall within the limits of acceptability, established in the facility's quality assurance procedures manual, then the protocol for corrective action, which is also written in the facility's quality assurance procedures manual was followed.



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PROCEDURE STEPS (Continued)

The specific quality control tests to be conducted by the radiologic technologist include the following 11 categories:

- DAILY: • Darkroom cleanliness, including cleaning of the processor crossover rollers
- Processor quality control
- WEEKLY: • Screen cleanliness
- Viewboxes and viewing conditions
- MONTHLY: • Phantom images
- Visual checklist
- QUARTERLY: • Repeat analysis
- Analysis of fixer retention in film
- SEMIANNUALLY: • Darkroom fog
- Screen-film contact
- Compression

The medical director needs to be familiar enough with the facility's quality assurance procedures manual to review and critique the results of any of the quality control tests. The review is to ensure tests were done properly, in a timely manner, and that test results were either within the control limits or that appropriate corrective action was taken.

2. The medical director shall review the medical physicist's report, ensuring that:
 - Mammographic unit assembly evaluation
 - Collimation assessment
 - Evaluation of focal spot performance
 - kVp accuracy and reproducibility
 - Beam quality assessment (half-value layer measurement)
 - Automatic exposure control (AEC) system performance assessment and AEC reproducibility
 - Uniformity of screen speed
 - Breast entrance exposure and average glandular dose
 - Image quality evaluation
 - Artifact evaluation
 - Evaluation of the technologist's QC program



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PROCEDURE STEPS

(Continued)

3. The medical director shall also ensure that:

- Clinical aspects of the x-ray examinations and other procedures related to mammography are appropriate
- The clinical image quality of mammograms is appropriate
- Safe operating procedures are used in the delivery of mammography services

The medical director should use the following checklist, or one designed by the facility, on a monthly basis to document that necessary reviews have been made.



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Mammography Quality Assurance Check List

Medical Director's Monthly Checks

Year												
Month	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Darkroom cleanliness												
Processor QC												
Screen cleanliness												
View boxes												
Phantom images												
Visual checklist												
Repeat Analysis (quarterly)												
Fixer retention (quarterly)												
Darkroom fog (semiannually)												
Screen-film contact (semiannually)												
Compression (semiannually)												
Physicist's report (annually)												
Clinical image quality is appropriate												
Safe operating procedures are used												
Clinical aspects of the x-ray exams and other procedures related to mammography are appropriate												

The appropriate box should be dated and initialed by the medical director when that particular review is complete.

This is a monthly duty